

ABSTRACT

An electrochemical cell comprises as an anode, a lithium transition metal oxide or sulphide compound which has a $[B_2]X_4^n$ spinel-type framework structure of an $A[B_2]X_4$ spinel wherein A and B are metal cations selected from Li, Ti, V, Mn, Fe and Co, X is oxygen or sulphur, and n- refers to the overall charge of the structural unit $[B_2]X_4$ of the framework structure. The transition metal cation in the fully discharged state has a mean oxidation state greater than +3 for Ti, +3 for V, +3.5 for Mn, +2 for Fe and +2 for Co. The cell includes as a cathode, a lithium metal oxide or sulphide compound. An electrically insulative lithium containing liquid or polymeric electronically conductive electrolyte is provided between the anode and the cathode.